

2. In the claims

Delete claims 2 to 5 without prejudice and insert the following claims 6 to 13.

1. ~~6.~~ A method of carrying out a continuous process of preparation of plastic material on an extruder, comprising
a housing,
at least two cylindrical housing bores, each housing bore having an axis, said axes being disposed parallel to each other, said housing bores intersecting each other and having a first end and a second end,
an inlet hopper being provided in the vicinity of said housing bores and opening into said housing bores,
a die head being disposed at said second end of said housing bores,
at least a first screw shaft and a second screw shaft being disposed in said at least first and second housing bores,
said at least first and second screw shaft being provided with a first screw and a second screw, respectively, each screw defining a screw root, said first screw and said second screw root tightly intermeshing and said second screw and said first screw root tightly intermeshing,
said first and said second screw each having a screw outer diameter D_a and a screw inner diameter D_i , said screw diameters being identical,
said at least first and second screw shaft each having a volumetric ratio of at least 1.5, wherein the volumetric ratio is defined by the screw outer diameter D_a divided by the screw inner diameter D_i , and
said first and said second axis having a distance a of axes,
a drive connectable to said at least first and second screw shaft to drive said at least first and second screw shaft in a same direction of rotation at a screw speed of rotation n_s and at a shaft torque M_d ,
wherein the method comprises the following steps:
feeding plastic material to be processed through the inlet hopper into said housing bores,
conveying said plastic material through said screw roots from said inlet hopper to said outlet,
driving each of said at least first and said second screw shaft at a screw speed of rotation n_s of at least 600 rpm, at a torque density $M_{d/a}$ of at least 11 Nm/cm³,
wherein the torque density is defined by the shaft torque M_a [Nm] at each first and second shaft divided by the third power of the distance a of the first and second axes of the first and second screw shaft.

2. ~~7.~~ A method according to claim ~~6~~, wherein said at least first and second screw shaft is driven at a screw speed of rotation n_s of at least 800 rpm.

3. ~~8.~~ A method according to claim ~~6~~, wherein the at least first and second screw shaft is driven at a screw speed of rotation n_s of up to 3000 rpm.

9. A method according to claim 6, wherein said at least first and second screw shaft is driven at a torque density M_d/a^3 of up to 15 Nm/cm^3 .

10. A method according to claim 6, wherein the plastic material is conveyed through said housing bores from said inlet hopper to said outlet at a mean product dwell time of less than 10 seconds.

11. A method according to claim 10, wherein the plastic material is conveyed through said housing bores from said inlet hopper to said outlet at a mean product dwell time of less than 2 seconds.

12. A method according to claim 6, wherein in addition to plastic material, pigments are fed into said housing bores.

13. A method according to claim 6, wherein said method is exercised on an extruder having a volumetric ratio of at least 1.55.

3. In the drawings

Please accept the proposed drawing change, which is the addition of Figures 3, 4 and 5, submitted under separate cover to the official draftsperson.

Applicant respectfully requests approval of the proposed drawing change.

Respectfully submitted,

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